

## IDENTIFIKASI JAMUR DAN BAKTERI PENYEBAB PENYAKIT PADA BAWAL AIR TAWAR (*Colossoma macropomum* Cuvier, 1816) DI DUSUN SORASAN KALURAHAN BIMOMARTANI KAPANEWON NGENEMPLAK KABUPATEN SLEMAN

Ikan bawal air tawar (*Colossoma macropomum* Cuvier, 1816) merupakan salah satu komoditas air tawar yang bernilai ekonomis dan sudah banyak dibudidayakan. Serangan penyakit merupakan salah satu permasalahan yang dihadapi dalam kegiatan budidaya bawal. Penelitian ini bertujuan mengidentifikasi jamur dan bakteri penyebab penyakit pada kasus kematian ikan bawal air tawar di Desa Sorasan, Ngemplak, Sleman. Ikan yang digunakan sebanyak 10 ekor ikan sakit dan 5 ekor ikan sehat. Sampling ikan sakit dilakukan dengan mengambil ikan yang menunjukkan gejala penyakit seperti sirip geripis, sisik terkelupas, jamur pada tubuh, ulcer, dan busuk pada mulut. Dari sampel ikan tersebut telah dilakukan pengamatan parasit, isolasi bakteri, dan isolasi jamur. Identifikasi bakteri dilakukan secara molekuler dan uji biokimia. Identifikasi jamur dilakukan secara molekuler dan pengamatan *slide culture*. Pembuktian patogen penyebab penyakit dilakukan dengan uji Postulat Koch. Hasil penelitian menunjukkan terdapat bakteri dan jamur sebagai penyebab penyakit ikan bawal. Bakteri tersebut teridentifikasi sebagai *Aeromonas veronii*, sedangkan jamur penyebab penyakit teridentifikasi sebagai *Mucor* sp., *Geotrichum* sp. dan *Rhizophus* sp.

Kata Kunci : *Aeromonas*, bakteri, bawal, jamur, Postulat Koch.

## Abstract

### IDENTIFICATION FUNGI AND BACTERIA CAUSED DISEASE OF TAMBAQUI (*Colossoma macropomum* Cuvier, 1816) AT SORASAN HAMLET BIMOMARTANI VILLAGE NGEMPLAK DISTRICT SLEMAN REGENCY

Freshwater tambaqui (*Colossoma macropomum* Cuvier, 1816) is one of the freshwater commodities that has economic value and began to be widely cultivated. Disease attack is one of the difficulties faced in the cultivation of tambaqui. This research aims to identify the fungi and bacteria caused of disease in the case of freshwater tambaqui death in Sorasan Village, Ngemplak, Sleman. The fishes used were 10 sick fishes and 5 healthy fishes. Sampling of sick fishes was done by taking fishes that show symptoms of diseases such as eroded fins, peeled scales, fungi on the body, ulcer, and necrosis in the mouth. From the fish samples have been carried out the observations of parasites, bacterial isolation, and fungal isolation. Identification of bacteria was done molecularly and biochemical tests. Identification of fungi was done molecularly and observation of slide culture. Proof of disease causing agent was carried out with the Koch Postulate test. The results confirmed that bacteria and fungi are the cause disease agents of tambaqui fish disease. The bacteria was identified as *Aeromonas veronii*, while the disease causing fungi were identified as *Mucor* sp., *Geotrichum* sp. and *Rhizopus* sp.

Keywords : *Aeromonas*, bacteria, fungus, Koch's postulate, tambaqui.